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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,297	09/09/2004	Argy Petros		5296

36988 7590 02/26/2007
THINK WIRELESS, INC.
6208 GRAND CYPRESS CIRCLE
LAKE WORTH, FL 33463

EXAMINER

LEE, PING

ART UNIT	PAPER NUMBER
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2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/711,297

Applicant(s)

PETROS, ARGY

Examiner

Ping Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al (hereafter Root) (US006013007A) in view of Byrne et al (hereafter Byrne) (US 20040252057A1) and French (US 4,538,034).

Regarding claim 1, Root discloses an assembly comprising two earpieces (see Figs. 3 and 5), an antenna module (301), a headband structure (see Fig. 5), and a cable assembly comprising one audio cable (121), an audio connector (120), a radio frequency cable (123) and a radio frequency connector (122). Root fails to show a ceramic path antenna and a low noise amplifier circuit to operate the antenna module in the frequency band of 2320 to 2335 MHz. Although regular AM/FM /TV radio has been shown, Root suggested that other audio entertainment system could be combined. It was well known to those in the art that SDARS can provide a functionally equivalent audio entertainment as the regular AM/FM /TV radio. Byrne teaches an SDARS antenna module with a ceramic patch antenna ([0022]) and a low noise amplifier circuit (126; [0023]). Thus, it would have been obvious to one of ordinary skill in the art to modify Root in view of Byrne by utilizing a SDARS antenna module on the headband in order to receive SDARS audio entertainment.

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Root also fails to show two audio cables. As shown in Fig. 5, the headphones in Root has a left and right speakers to be put next to the left and right ear of the user respectively. Although Fig. 5 only shows the cable (121) directly connected to the left speaker, an electrical wire was inherently provided to provide the audio signal to right speaker as well. French teaches a layout with an audio cable connector (14) and two audio cables (12) for providing the audio signals to the left and right speakers respectively. Thus, it would have been obvious to one of ordinary skill in the art to modify Root in view of French by using two cables and an audio connector in order to provide the signals to the left and right speakers respectively.

Regarding claim 2, Root discusses the mounting means (col. 5, lines 21-22).

3. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Root et al (hereafter Root) (US006013007A) in view of Lorbeck (US 20030114135A1) and French (US 4,538,034).

Regarding claim 1, Root discloses an assembly comprising two earpieces (see Figs. 3 and 5), an antenna module (301), a headband structure (see Fig. 5), and a cable assembly comprising one audio cable (121), an audio connector (120), a radio frequency cable (123) and a radio frequency connector (122). Root fails to show a quadrifilar antenna and a low noise amplifier circuit to operate the antenna module in the frequency band of 2320 to 2335 MHz. Although regular AM/FM /TV radio has been shown, Root suggested that other audio entertainment system could be combined. It was well known to those in the art that SDARS can provide a functionally equivalent audio entertainment as the regular AM/FM /TV radio. Lorbeck teaches an antenna

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module with a quadrifilar antenna (302) and a low noise amplifier circuit (306). The antenna module is small in size. Thus, it would have been obvious to one of ordinary skill in the art to modify Root in view of Lorbeck by utilizing a quadrifilar antenna module on the headband in order to receive SDARS audio entertainment.

Root also fails to show two audio cables. As shown in Fig. 5, the headphones in Root has a left and right speakers to be put next to the left and right ear of the user respectively. Although Fig. 5 only shows the cable (121) directly connected to the left speaker, an electrical wire was inherently provided to provide the audio signal to right speaker as well. French teaches a layout with an audio cable connector (14) and two audio cables (12) for providing the audio signals to the left and right speakers respectively. Thus, it would have been obvious to one of ordinary skill in the art to modify Root in view of French by using two cables and an audio connector in order to provide the signals to the left and right speakers respectively.

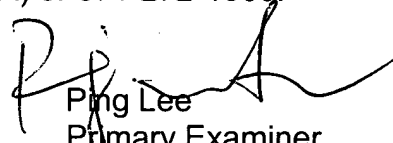
Regarding claim 4, Root discusses the mounting means (col. 5, lines 21-22). One skilled in the art would have expected that any mounting means could be utilized to mount the quadrifilar antenna module.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ping Lee
Primary Examiner
Art Unit 2615

pwl